NATURAL RESOURCES CONSERVATION SERVICE
CONSTRUCTION SPECIFICATION

WATER AND SEDIMENT CONTROL BASIN

1. SCOPE

The work shall consist of constructing Water and Sediment Control Basins as shown on the drawings and/or at locations as directed by the NRCS Engineer or designated representative.

2. MATERIAL

a. The earth material used in constructing the basin shall be obtained from the basin channel, designated borrow areas or other excavation.

b. Fill material shall contain no frozen particles, rock particles greater than 6 inches in diameter, sod, brush or other objectionable material.

c. The fill material shall have a moisture content sufficient to secure compaction. When kneaded in the hand, it will form a ball which does not readily separate when struck sharply with a pencil and will not extrude out of the hand when squeezed tightly.

3. FOUNDATION PREPARATION

The base area of the embankment sections shall be stripped of unsuitable material and scarified prior to placing fill. Available topsoil shall be salvaged and stockpiled for later spreading.

4. PLACEMENT

a. Fill material shall not be placed on frozen soil.

b. All fill materials shall be placed and spread in layers not over 9 inches thick prior to compaction. Each layer shall be compacted by traversing the entire surface with not less than 2 of a bulldozer or loaded earth moving equipment or by not less than 1 pass of a sheepsfoot roller exerting a pressure of at least 100 pounds per square inch.

c. The distribution of materials throughout the fill shall be such that there will be no lenses, pockets, streaks or layers of materials differing substantially in texture or gradation from surrounding materials.

5. EXCAVATION

Excavation shall be to the lines and grades shown on the drawings. All surplus or unsuitable excavated materials shall be disposed of at the locations shown on the drawings or approved by the NRCS Engineer or designated representative.

6. OUTLETS

The type of outlet to be installed will be as shown in the drawings.

Trench excavation for installation of outlets under the basin embankment shall be done as described on the drawings or as follows:

Method A - For outlets installed at the same time as the basin embankment, the trench side slopes shall be a minimum of 1:1 and the bottom width shall be a minimum of 2 times the conduit diameter. The backfill under the basin embankment shall be hand tamped in successive layers of not more than 6 inches after compaction. Manually compact the fill up to the level of the original ground above the conduit or as specified on the drawings.

Method B - For outlets installed one year or more prior to the embankment construction, the trench will be excavated and backfilled in accordance with Specification, SUBSURFACE DRAINAGE SYSTEMS.

7. TOPSOIL SPREADING

Stockpiled topsoil shall be spread on the embankment slopes to a depth of not less than 4 inches, unless otherwise approved by the NRCS Engineer or designated representative or landowner. The underlying soil will be scarified to permit proper bonding of the topsoil to the subsoil.Spreading shall not be done when the ground or topsoil is frozen, excessively wet or otherwise in a condition detrimental to the work. After placement is complete, the topsoil shall be finished to a smooth surface. Grading on the upstream toe of the embankment shall be done to insure positive drainage to the outlet.

8. SEEDING

Where required, the basin shall be prepared, fertilized, seeded and mulched in accordance with Specification, SEEDING.

9. ADDITIONAL ITEMS WHICH APPLY TO THIS JOB